

What is claimed is:

1. A bill of material (BOM) comparison system for automatically comparing current BOMs with corresponding original BOMs, and recording differences between the BOMs if any change of design occurs, the system comprising:

a database comprising a changed BOM file for storing BOMs that need to be compared, and an original BOM file for storing corresponding original BOMs that can be compared with the current BOMs; and

a BOM comparison module for comparing contents of the changed BOM file and the original BOM file, and for generating a comparative BOM file.

2. The BOM comparison system according to claim 1, wherein the system comprises a plurality of BOM comparison modules, each of which is installed in a respective designing computer.

3. The BOM comparison system according to claim 1, wherein the changed BOM file and the original BOM file comprise information on parts, including part item names, amounts of the parts in a product, the part's positions in the product, the part's specifications, and detailed descriptions of the parts.

4. The BOM comparison system according to claim 1, wherein the comparative BOM file comprises a changed sub-file and a comparative sub-file.

5. The BOM comparison system according to claim 1, further comprising a database connection module for connecting the BOM comparison module with the files in the database, said files comprising the changed BOM file, the original BOM file and the comparative BOM file.

6. The BOM comparison system according to claim 1, further comprising a database server that comprises a database management module for managing the changed BOM file, the original BOM file and the comparative BOM file, and for creating, adding, deleting, updating and inquiring of said files.

7. A bill of material (BOM) comparison method for automatically comparing current BOMs with corresponding original BOMs, and for recording differences between the BOMs if any change of design occurs, the method comprising the steps of:

- retrieving a changed BOM file and an original BOM file;
- generating a changed sub-file according to the changed BOM file;
- generating an intermediate sub-file according to the original BOM file;
- comparing information on parts in the changed sub-file with information on parts in the intermediate sub-file;
- generating a plurality of sub-files to record comparative results; and
- integrating the sub-files into a comparative BOM file.

8. The BOM comparison method according to claim 7, wherein the information on the parts comprises part item names, amounts of the parts in a corresponding product, the parts' positions in the product, the parts' specifications, and detailed descriptions of the parts.

9. The BOM comparison method according to claim 7, wherein the comparative results comprise any one or more of parts that are added or deleted, and changes to amounts and positions of parts.

10. The BOM comparison method according to claim 7, wherein the sub-files comprise a changed sub-file and a comparative sub-file.